

REMARKS

On September 17, 2004 Applicants submitted remarks regarding an Office Action that only addressed claims 1-7. As stated in the remarks, it was Applicants' understanding that the Office was withdrawing the Office Action and issuing a new one that addresses all of the pending claims. On September 23, 2004, the Office mailed the new office action. On December 3, 2004, apparently in response to Applicants' remarks, the Office mailed another office action. It is Applicants' understanding that the December 3, 2004 office action is identical to the September 23, 2004 office action. As a result, Applicants respectfully submit that this amendment comprises a full and complete response to both the September 23, 2004 and December 3, 2004 office actions.

By this amendment, Applicants have amended claims 1 and 8, canceled claims 4-6 and 9, and added new claims 21-24. As a result, claims 1-3, 7-8, and 10-24 are pending in this application. These amendments are being made to facilitate early allowance of the presently claimed subject matter. Applicants do not acquiesce in the correctness of the objections and rejections and reserve the right to pursue the full scope of the subject matter of the original claims in a subsequent patent application that claims priority to the instant application. Reconsideration in view of the following remarks is respectfully requested.

In the Office Action, claims 15-20 are allowed and claims 6, 10, and 12 are objected to as being dependent upon a rejected base claim. Applicants thank the Examiner for noticing the patentable subject matter of these claims. In response, a new independent claim 21 has been added that claims the allowed subject matter of claim 6. As a result, Applicants respectfully request allowance of this claim.

Additionally, the Office rejects claims 1-5, 7-9, 11, 13, and 14 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,178,275 (Nerves) in view of U.S. Publication No. 2003/0016716 (Mahonty) further in view of U.S. Patent No. 5,468,972 (Yamada). Applicants respectfully submit that the combination of Nerves, Mahonty and Yamada fail to make all of the claimed limitations obvious as required by 35 U.S.C. § 103(a).

For example, with respect to claim 1, Nerves provides a chip that includes a launcher line and a receiver line. Abstract. The launcher line includes a photoconductive switch that is pulsed using a laser. Abstract. In sharp contrast, Applicants' claimed invention includes a semiconducting device that comprises at least one of: a heterodimensional diode, a field effect transistor array, a heterodimensional diode array, and an array of rectifying contacts. Nerves fails to disclose, *inter alia*, the use of any of these types of semiconducting devices. Further, neither Mahonty nor Yamada cures this defect. As a result, Applicants respectfully request withdrawal of this rejection.

With further respect to claim 1, the laser in Nerves is shined on a photoconductive switch. In sharp contrast, Applicants' claimed invention shines the laser onto the semiconducting device, which comprises at least one of: a heterodimensional diode, a field effect transistor array, a heterodimensional diode array, and an array of rectifying contacts. Nerves fails to disclose, *inter alia*, the use of a laser in the claimed manner. Further, neither Mahonty nor Yamada cures this defect. As a result, Applicants respectfully request withdrawal of this rejection.

With respect to the currently pending claims 2-3 and 7, Applicants note that the Office relies on its interpretation of the combination of Nerves, Mahonty and Yamada in view of claim 1, from which these claims depend, in rejecting these claims. As a result, Applicants incorporate

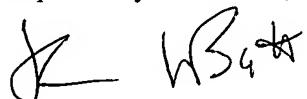
the arguments presented above with respect to claim 1. Further, Applicants respectfully submit that these claims are patentable for one or more of their own unique features. As a result, Applicants respectfully request withdrawal of these rejections.

With respect to claim 8, as discussed above, Nerses discloses the use of a laser to operate a photoconductive switch. In sharp contrast, Applicants' claimed invention shines a laser pulse onto at least one of: a gate-source spacing, a gate, a gate-drain spacing, and a substrate of a field effect transistor. Nerses fails to disclose, *inter alia*, the use of a laser in the claimed manner. Further, neither Mahonty nor Yamada cures this defect. As a result, Applicants respectfully request withdrawal of this rejection.

With respect to the currently pending claims 11, 13, and 14, Applicants note that the Office relies on its interpretation of the combination of Nerses, Mahonty and Yamada in view of claim 8, from which these claims depend, in rejecting these claims. As a result, Applicants incorporate the arguments presented above with respect to claim 8. Further, Applicants respectfully submit that these claims are patentable for one or more of their own unique features. As a result, Applicants respectfully request withdrawal of these rejections.

With respect to the newly added claims 22-24, Applicants respectfully submit that these claims are allowable as presented. In light of the above, Applicants respectfully submit that all claims are in condition for allowance. Should the Examiner require anything further to place the application in better condition for allowance, the Examiner is invited to contact Applicants' undersigned representative at the number listed below.

Respectfully submitted,



John W. LaBatt, Reg. No. 48,301
Hoffman, Warnick & D'Alessandro LLC
Three E-Comm Square
Albany, NY 12207
(518) 449-0044 - Telephone
(518) 449-0047 - Facsimile

Dated: December 23, 2004